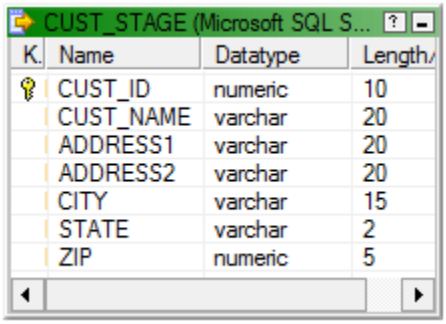
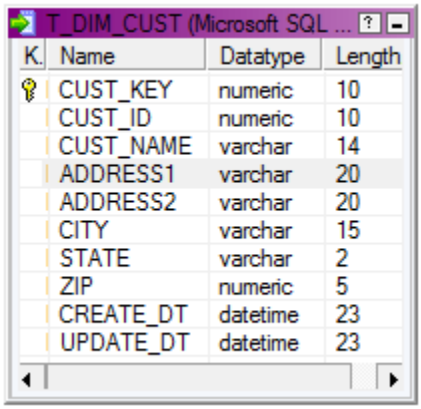
SCD Type 1

Slowly Changing Dimension Type 1 do not preserve any history versions of data. This methodology overwrites old data with new data, and therefore stores only the most current information.
Step by step implementation of SCD Type 1 using Informatica Power Center.

Below is the structure of source table.



Source table will have only current data. Data is uniquely identified using CUST_ID.
Below is the structure of Dimension table or target .

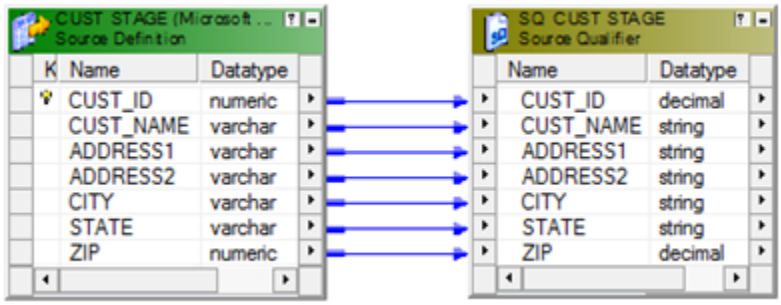


CUST_KEY is the surrogate key.
CUST_ID is the Natural key, the unique record identifier.

SCD Type 1 Mapping:

Step 1

Drag the CUST_STAGE source definition into the mapping designer.

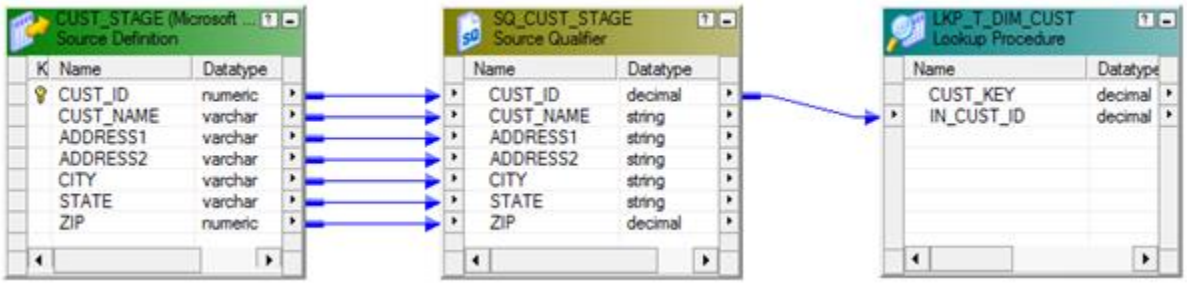


Step 2

Next using a LookUp Transformation fetch the existing Customer columns from the dimension table T_DIM_CUST. This lookup will give NULL value if the customer does not exist.

LookUp Condition : IN_CUST_ID = CUST_ID

Return Columns : CUST_KEY



Step 3

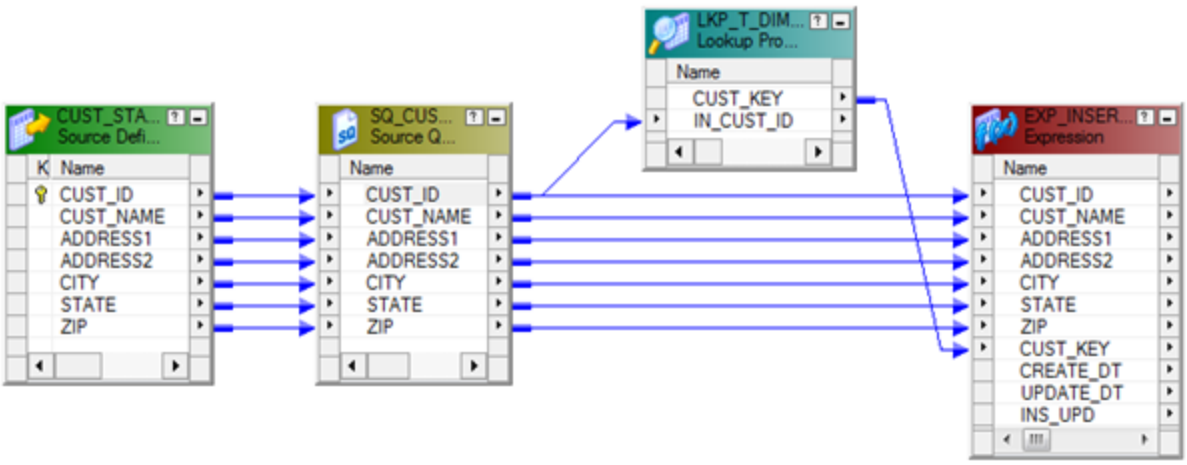
Use an Expression Transformation to identify the records for Insert and Update. Below expression identifies the record.

INS_UPD :- IIF(ISNULL(CUST_KEY),'INS', 'UPD')

Create two output ports.

CREATE_DT :- SYSDATE

UPDATE_DT :- SYSDATE

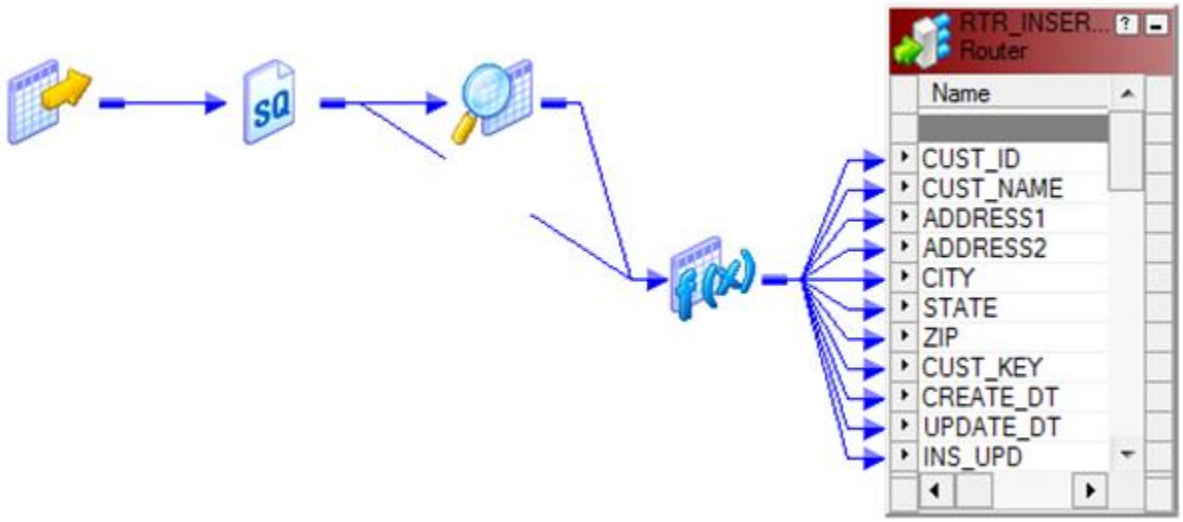


Step 4

Map the columns from the Expression Transformation to a Router Transformation and create two groups (INSERT, UPDATE) in Router Transformation using the below expression.

INSERT :- IIF(INS_UPD='INS',TRUE,FALSE)

UPDATE :- IIF(INS_UPD='UPD',TRUE,FALSE)

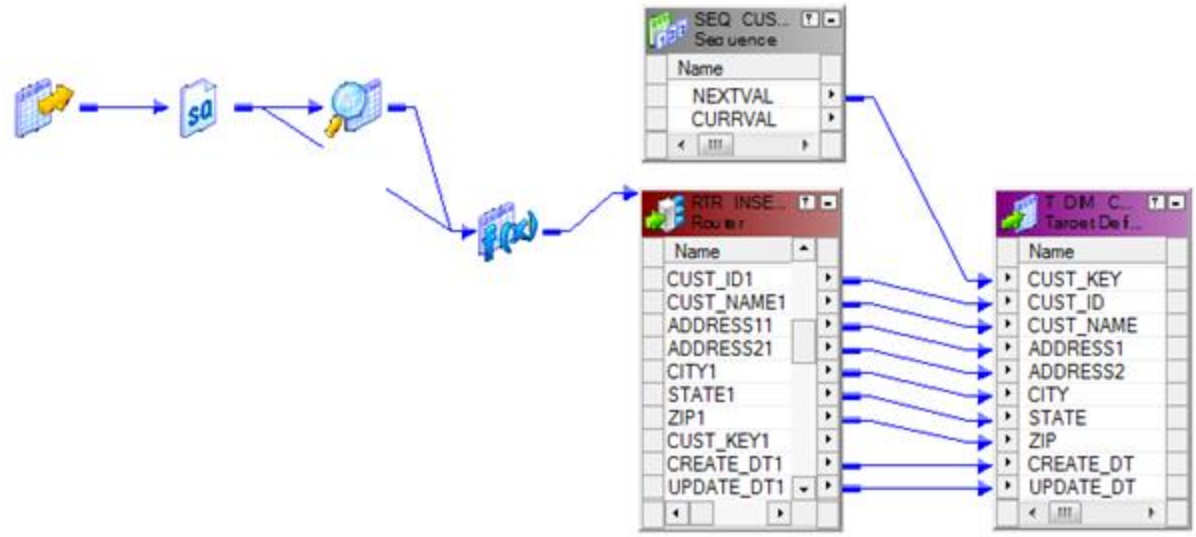


Insert Group:

Step 5

Every records coming through the 'INSERT Group' will be inserted into the Dimension table T_DIM_CUST.

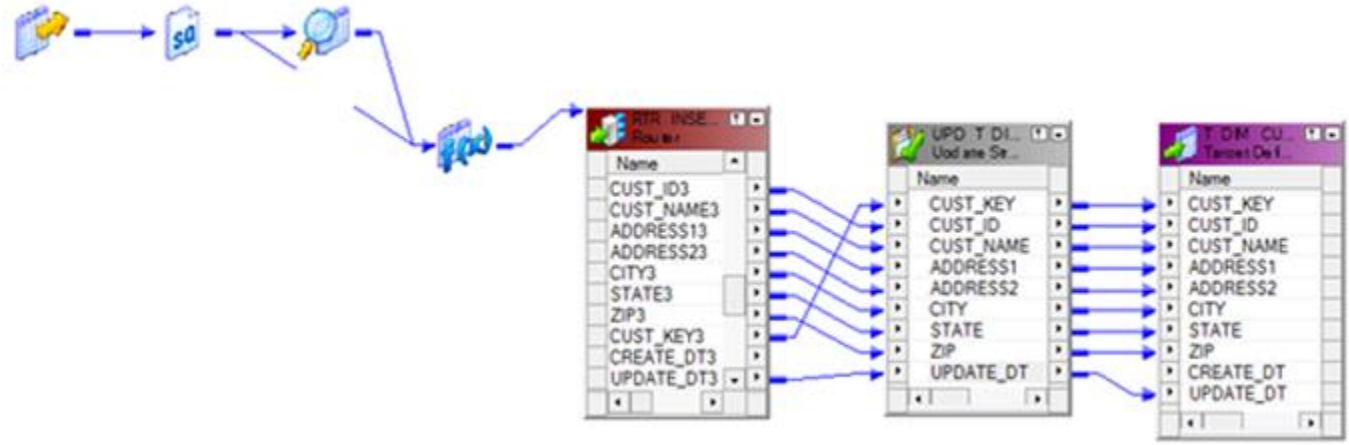
Use a Sequence generator transformation to generate surrogate key CUST_KEY. And map the columns from the Router Transformation to the target.



(Update Strategy transformation is not used for the records that are set for Insert.)

Step 6

Records coming from the 'UPDATE Group' will update the customer Dimension with the latest customer attributes. Add an Update strategy transformation before the target instance and set it as DD_UPDATE. Below is the structure of the mapping.



Completed Mapping: